

# Connecting People to Their Public Lands

An Update on BLM Education, Interpretation, Volunteer, and Youth Employment Activities

2014

PLAY • LEARN • SERVE • WORK



# Contents

Letter from the Director	1
Introduction	2
Alaska	6
Arizona	8
California	10
Colorado	12
Eastern States	14
Idaho	16
Montana/Dakotas	18
Nevada	20
New Mexico/Oklahoma/Texas	22
Oregon/Washington	24
Utah	27
Wyoming	30
Appendix	32



This report, organized by BLM state, includes Fiscal Year 2013 program highlights in key areas, which are identified in the text by the following icons:

## PLAY



**Take It Outside!**—Outdoor programs for kids and families

## LEARN



**Interpretation**—Programs at visitor centers and other informal venues

**Hands on the Land**—The BLM's network of outdoor classrooms

**Education**—Programs for schools

**Project Archaeology**—Programs for heritage educators

## SERVE



**Volunteers**—Volunteers on the public lands

## WORK



**Youth**—Youth hiring programs

Cumulative statistics, provided in charts beginning on page 32, are based on the results of a comprehensive data collection effort conducted in spring 2014.

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BLM Division of Education, Interpretation, and Partnerships, 1849 C Street, NW, 2134LM, Washington, DC 20240.

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# From the Director

On behalf of the Secretary of the Interior and the Bureau of Land Management, I am pleased to present Connecting People to Their Public Lands, the BLM's 2014 update on education, interpretation, volunteer, and youth engagement activities. The programs and projects described here represent only a small sampling of the ways in which BLM employees work to connect local communities to BLM public lands. These efforts clearly demonstrate the BLM's commitment to the Secretary's goal of "engaging the next generation" by providing opportunities for youth—as well as families, educators, and the general public—to play, learn, serve, and work on the public lands.



Overall, the BLM has achieved a remarkable level of success in these programs, based on strong state office, district office, and field office participation. Among the accomplishments we document for Fiscal Year 2013:

- More than 68,000 youth and families participated in over 250 Take It Outside! activities.
- Over 61,000 students, teachers, and parents participated in formal education programs at our Hands on the Land outdoor classrooms.
- Some 30,000 volunteers contributed more than 1.1 million hours, worth an estimated \$26 million.
- The 20<sup>th</sup> annual National Public Lands Day brought thousands of volunteers to 136 BLM sites.
- The BLM and partner organizations hired about 3,200 youth for project-based work and internships.
- Our interpretation programs engaged an estimated 4.5 million visitors and guests on the public lands.

These undertakings would not have been possible without solid connections among the BLM, the communities we serve, and the partners and volunteers who support our programs. We share a clear vision of BLM public lands as ideal settings for superlative programs for both today's audiences and the generations to come.

A handwritten signature in black ink that reads "Neil Kornze".

Neil Kornze

# Introduction



## PLAY

With 245 million acres to manage, the BLM offers plenty of places to play. Each year, more than 59 million people visit, bringing family, friends—and kids. **Take It Outside!** offers fun activities for young people and families on the BLM's public lands. The program was established to help ensure that children, youth, and families have access to outdoor experiences on public lands. In 2013 the BLM achieved its Take It Outside! program goals by reaching more than 68,000 youth and families, who participated in over 250 different activities to get outdoors and active on BLM lands. Participants attended 34 overnight and day camps and 114 recreational outings, such as fishing, hiking, and paleontology explorations.

The mission of the **Stewardship Program** is to build appreciation and “ownership” of the public lands by fostering a connection between people and the land through outdoor experiences, education, and volunteerism. The BLM relies on partners and volunteers to help fulfill the Stewardship Program's mission. Two of the BLM's long-standing partners, Leave No Trace and Tread Lightly!, Inc., help the agency promote stewardship and teach outdoor ethics to the public and BLM staff. In 2013 Tread Lightly! trained 115 BLM staff as master Tread Lightly! trainers, while 10 BLM staff completed the 5-day Leave No Trace master educator course. Seventy-eight BLM-hosted Take It Outside! activities included Tread Lightly! and Leave No Trace outdoor ethics sessions in 2013, helping to ensure that participants recreate responsibly.

**Youth groups** such as the Boy Scouts of America, Girl Scouts of the USA, and other national organizations work closely with BLM offices on youth programs. In the summer of 2013, for example, the BLM helped teach Leave No Trace and Tread Lightly! outdoor ethics to more than 1,000 Boy Scouts and visitors at the Boy Scouts' 2013 National Scout



Jamboree in West Virginia, in addition to leading instruction for the archaeology merit badge. Nationwide in 2013 the BLM worked with 592 partners from nonprofit organizations, schools, businesses, and government agencies on Take It Outside! and stewardship programs. The BLM's investment of more than 21,000 hours of staff time was more than doubled by 38,400 volunteer hours. These efforts helped the BLM accomplish stewardship projects, get youth and families outdoors, and nurture future stewards of the public lands.



## LEARN

Educational programs and interpretation programs are essential for the BLM to achieve its mission of sustaining the health, diversity, and productivity of America's public lands. Public lands are significant resources for engaging learners of all ages about cultural heritage and the natural world in which we live. Programs include the Hands on the Land network of outdoor classrooms; Project Archaeology training for educators; interpretive programs at visitor centers and other venues; and a variety of other educational outreach programs.



## Hands on the Land

**Hands on the Land** (HOL) is a national network of outdoor classrooms on public lands. HOL sites develop education programs in partnership with local schools and communities. For the BLM, Hands on the Land is the principal means of delivering formal education programs to school audiences. In Fiscal Year 2013 the BLM's 56 HOL sites hosted 1,277 days of outdoor classroom activities and engaged more than 61,000 students, teachers, and parents.

## Interpretation

The BLM's **Interpretation Program** connects public lands visitors to natural and cultural resources, enhancing understanding of resource management issues, adding to the quality of the visitor experience, and building interest in America's public lands. In 2013 almost 4.5 million people at 72 BLM sites participated in interpretive programs, walking tours, guided activities, and interpretive demonstrations, or benefited from nonpersonal interpretive media, including wayside kiosks, exhibits, films, websites, and social media.

The BLM recognized two BLM interpreters and educators with 2013 **Excellence in Interpretation or Environmental Education Awards** for programs they developed to enhance understanding of the public lands and management issues related to the BLM's multiple-use mission. The winners were Holly Beck of BLM-Idaho's Bruneau Field Office and Kathi Fine of BLM-Wyoming's Rock Springs Field Office. The awards were presented at the National Association for Interpretation's National Workshop in Reno, Nevada.

During 2013, BLM state and field offices produced more than a dozen new **Junior Explorer** activity guides. These kid-friendly booklets were completed for BLM sites in California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, and Wyoming.

Through art, the BLM **Artist-in-Residence Program** encourages awareness of exceptional places on the public lands and provides an opportunity for learning and dialogue about the value of preserving important resources and landscapes. In 2013 the BLM hosted three artists, working in media ranging from pastels to oil paints, at Colorado's Canyons of the Ancients National Monument and Utah's Grand Staircase-Escalante National Monument. The program's tagline is "Taking Public Lands to Heart."

## Other Formal Education Programs

The BLM is organized into more than 150 state, district, and field offices, whose staff conduct hundreds of educational outreach programs each year. Many of these programs involve long-term partnerships with local schools and school districts. In times of tight school budgets, BLM staff and volunteers have enhanced curricula with classroom programs, reaching nearly 118,000 students in 2013. Generations of residents in local communities have learned to love and respect their public lands through the BLM's educational programs.

## Project Archaeology

Through a partnership between the BLM and Montana State University, the **Project Archaeology** heritage education program offers basic and advanced professional development for educators throughout the nation. In 2013 Project Archaeology launched a new website to serve educators and students. The program also completed an introductory video for professional development. Project Archaeology-trained educators reached an estimated 14,888 learners with archaeology education in 2013.





conservation areas, national scenic rivers, and other units of the BLM's National Landscape Conservation System (National Conservation Lands).

Marking its 20<sup>th</sup> celebration in 2013, **National Public Lands Day** engaged the services of an estimated 175,000 volunteers working on 2,200 projects in all 50 states, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands. Of these, almost 10,000 were BLM volunteers who performed work on 189 projects at 136 sites hosted by 94 field offices in 16 states. These projects produced at least \$1.5 million in enhancements to the BLM's public lands and facilities.

In May 2013 the BLM presented its **"Making a Difference" National Volunteer Awards** to four individuals, one couple, one group, and one BLM employee for outstanding volunteer service or volunteer leadership on BLM-managed lands.

The selected volunteers were: Ray and Linda Panter, Central Yukon Field Office, Alaska; Annette Froehlich (Lifetime Achievement), Las Cruces District Office, New Mexico; Joshua Barlow, Price Field Office, Utah; Upper Ridge Wilderness Association (Lifetime Achievement), Redding Field Office, California; Illa Willmore (Lifetime Achievement), Upper Missouri River Breaks National Monument, Montana; and Pat Williams (Milestone Award),

Red Rock Canyon National Conservation Area, Nevada. Warren J. Trogden, Sr., Challis Field Office, Idaho, was the winning BLM employee.



## SERVE

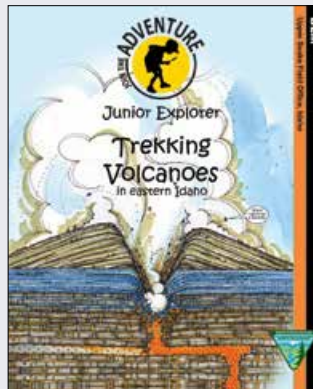
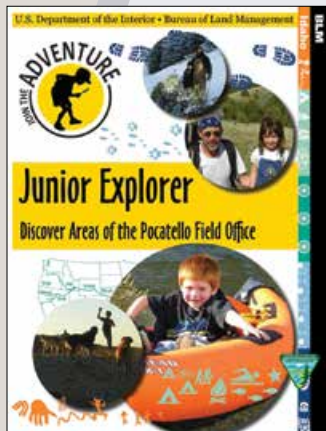
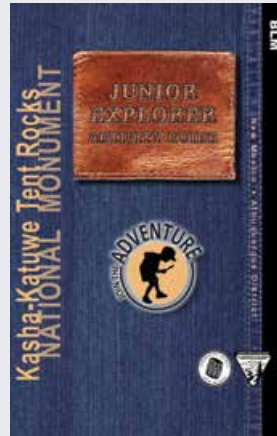
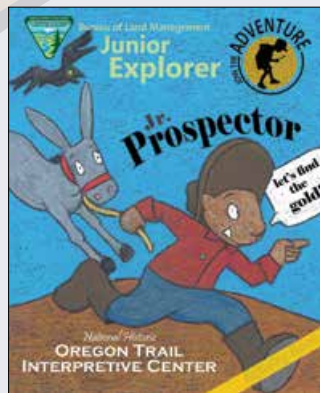
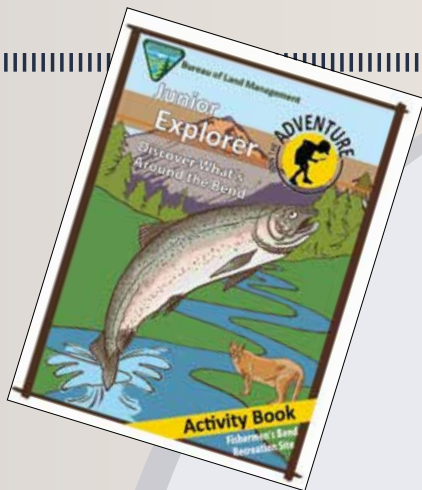
As the nation's largest land manager, the BLM relies on thousands of volunteers who offer their time in service to the nation's natural and cultural resources. The BLM **Volunteer Program** engaged more than 30,000 volunteers in 2013. Volunteer contributions exceeded 1.1 million hours, or the equivalent of 641 work years, at an estimated value of \$26 million to the BLM. Volunteers contribute their time, services, and skills to a wide variety of BLM program areas, including Recreation, Wild Horses and Burros, Wilderness, Cultural/Historical Resources, and Environmental Education/Interpretation. The return on investment for the Volunteer Program was roughly 22:1 in 2013 (that is, for every \$1 spent on the program, the BLM received more than \$22 in services contributed by volunteers). About one-third of the volunteer hours were spent working on national monuments, national



## WORK

The BLM **Youth Program** supports initiatives and activities that build on the spark of childhood wonder about the natural world, sustain interest through hands-on education and volunteer experiences, and encourage long-term engagement and stewardship, as well as the pursuit of natural resource careers. In Fiscal Year 2012 the BLM had engaged more than 4,800 youth in project-based work and internships through student employment programs and through partnerships with youth-serving organizations, including youth corps. Despite budget cuts and restrictions on seasonal hiring, BLM states were still able to hire about 3,200 youth in 2013. The statistic is based on more than 1,100 reports submitted by BLM state and local offices.





The Junior Explorer program provides an avenue for all segments of the BLM to create and provide engaging high-quality educational materials to parents, children, and teachers. In Fiscal Year 2013, BLM state and field offices created more than a dozen Junior Explorer booklets. Covers of several Junior Explorer booklets are shown above. Copies of all the Junior Explorer booklets can be downloaded from the BLM website, [www.blm.gov/education](http://www.blm.gov/education).

## A Strategy To Bring It All Together

In February 2013 the BLM published a new *Education, Interpretation, and Youth Engagement National Strategy, 2013–2018*. The strategy emphasizes the BLM's commitment to programs that foster connections between people and their public lands, expand understanding of the BLM's complex mission, and inspire conservation stewardship and service. The national strategy was accompanied by an implementation plan for internal use. In accordance with that plan, BLM states designed step-down implementation plans using a common format. At all levels, specific action items will help the BLM to achieve long-range goals and objectives. By addressing such priorities as shared stewardship and youth engagement, the strategy provides a vision and a plan for the next 5 years.





# Alaska

*BLM-Alaska works closely with local communities to educate people of all ages about science and natural resource management topics and to interpret the vast resources of the state for visitors and residents alike. In Anchorage the Campbell Creek Science Center works with the Anchorage School District, Friends of the Campbell Creek Science Center, and others to increase participation by underserved audiences in center programs. In northern Alaska the BLM-managed Arctic Interagency Visitor Center provides unique interpretive programs and vital safety information for people traveling the Dalton Highway.*



## PLAY

### Outdoor Week Event Gets Kids To Celebrate Summer Fun

**Anchorage:** The Campbell Creek Science Center, with assistance from the BLM and many outside partners, hosted a 4-day Outdoor Week extravaganza in May 2013. Nearly 1,700 sixth-graders participated in outdoor learning experiences with professionals from a variety of natural resource fields. Each child visited five different educational stations along one of four woodland loop trails, panning for gold, learning Bear Aware techniques, and exploring archaeology, birding, fly tying and fly fishing, Global Positioning Systems, weather, and more.

### Ice Fishing Techniques

**Glennallen:** At the winter Kids Ice Fishing Clinic on Silver Lake, 152 participants learned how and where to drill an ice hole, how to set up an ice fishing pole and work the reels, what kind of bait and tackle to use, and how deep to drop a line. After the excitement of catching an iridescent, 17- to 22-inch rainbow trout, the kids learned how to remove hooks safely, handle fish humanely, and hold their catches for photos. Activities were conducted by a BLM fisheries biologist and a youth and volunteer programs coordinator from the Glennallen Field Office, along with partners and volunteers.

## Healthy Fish Habitat

**Glennallen:** In partnership with the Wrangell Institute for Science and Environment, the BLM hosted an overnight Aquatic Ecology Camp that allowed Alaskan youth to explore fish habitat and the basics of watershed ecology through hands-on activities and real-world outdoor experiences. In addition, the campers built a model town and meandering river to learn about erosion.



## LEARN

### Antique Mining Drill Churns Again

**Coldfoot:** In the fall of 2013 the past roared back to life at the Arctic Interagency Visitor Center when a 1920s-era churn drill—donated to the BLM in 2009 and reconstructed—was fired up for the first time in decades. In the early 20<sup>th</sup> century, gas-powered churn drills offered Alaska placer miners a major technological advance, allowing them to dig test holes through frozen gravel much more efficiently than with picks and shovels. The restored drill, located near the Coldfoot Visitor Center, will join a replica prospector's cabin and other gold-mining artifacts in an outdoor display under construction.

### BLM Helps Girl Scouts “Capture Alaska in Digital”

**Palmer:** At the 2013 Alaska Girl Scout encampment at the State Fairgrounds, the BLM cohosted a series of photography workshops for nearly 100 of the 1,000 Girl Scouts in attendance. BLM staff helped the third- through seventh-graders create paper “viewfinders” and taught them about photo orientation, composition, lighting, and capturing wildlife images responsibly. The girls tried out their new skills on human subjects as well as BLM-furnished insect specimens and plaster casts of animal tracks.

### Rock Floats—Kids Amazed!

**Glennallen:** A BLM-Alaska geologist and a natural resource specialist visited Copper Center Elementary School's







second- to fifth-graders to help the students understand the importance of geology and mining in their everyday lives. Students learned about the properties of graphite by using it to write their names on paper. They also found out that a rock can float—that is, if that rock is a piece of pumice. Students were jumping out of their seats to get their hands on the bobbing rock.



## SERVE

### Interns Aid Science Instructors

**Anchorage:** Ten high school students took part in the Summer Youth Internship Program at the Campbell Creek Science Center, gaining experience in the fields of outdoor science education and public land management. Together they contributed more than 650 hours of service to the center. In addition to assisting instructors with outdoor educational programs and community outreach events, they participated in the annual butterfly count, creek bio-assessments, juvenile fish identification efforts, and data collection for the BLM Forest Vegetation Information System.

### Packing Out the Trash

**Glennallen:** More than 50 volunteers and partner representatives came together to clean the banks of the Copper River in Chitina, Alaska. Volunteers removed junked appliances, couches, chairs, broken vehicle parts, and piles of twisted metal, tin, and wood, filling several pickups and large trailers with debris and trash. Wrangell-St. Elias National Park and Preserve Youth Conservation Corps students, Chitina Village youth, and several nonprofit partner volunteers cleaned 240 feet of the riverfront and adjacent roadway at the Copper River Bridge and an additional 2,685 feet of roadway in Chitina.

### Scouts Set Signs for Steese

**Steese National Conservation Area:** Over the course of a 3-day weekend in August 2013, a dozen Boy Scouts and

five leaders installed three large BLM entrance signs in the Steese National Conservation Area. Finding an efficient way to install these large entrance signs posed some unique challenges, but the Scouts managed to level the area at each site and build three sturdy sign bases that should easily outlast generations of new signs.



## WORK

### Dalton Highway Summer Intern

**Coldfoot:** The Arctic Interagency Visitor Center (AIVC) welcomed intern Christie Andy during summer 2013. Christie assisted Dalton Highway travelers at the visitor center and greeted visitors near the Arctic Circle. She delivered short interpretive talks on local Alaska Native culture, served as project lead for the AIVC's new recycling program, and participated in a snowshoe hare field study. Christie's 8-week internship represented a first-ever partnership between the AIVC and First Alaskans Institute, an Anchorage-based organization with a mission of increasing leadership capacities in Alaska Native communities.

### Reindeer Research

**Fairbanks:** Four interns from the University of Alaska at Fairbanks monitored grazing range conditions on the Seward Peninsula as part of the state's Reindeer Research Program. The BLM works with other federal agencies and Alaska's Department of Natural Resources to administer grazing permits for reindeer herders. By assisting with range monitoring and exclosure construction during the summer, the interns helped ensure that sufficient food would be available for reindeer herds through the long winter.

### Improving Community Access

**Glennallen:** Some two dozen Student Conservation Association crewmembers came from around the country to the Glennallen Field Office area to work for more than 3,000 hours on trail construction projects during the summer. Part of an officewide commitment to expand community access to BLM- and state-managed lands, the crews worked through all kinds of weather on several projects, including the new Swede Mountain Trail, with its remarkable views of the Alaska Range.

# Arizona

*Boasting 12 million acres of public lands within its jurisdiction, BLM-Arizona offers visitors an immense outdoor classroom and endless opportunities for outdoor activity. Venues for interpretation range from Betty's Kitchen Interpretive Area in Yuma to the San Pedro Riparian National Conservation Area in Sierra Vista. And in Phoenix, the BLM has forged a strong partnership with River Pathways and Phoenix College to engage youth in natural resource education and careers.*



## PLAY

### "El Día de los Niños" Celebrates Children

**Phoenix:** BLM-Arizona celebrated "El Día de los Niños"—Children's Day—in the spring of 2013 with an event attended by more than 5,000 children in downtown Phoenix. For the third year, the BLM Phoenix District Office and BLM-Arizona State Office staff joined the Latino Institute, additional city departments, organizations, educators, schools, and volunteers to organize and participate in this multicultural event celebrated around the world. Special guest Seymour Antelope, the costumed BLM mascot, was a huge hit with the children.

### Celebrating Veterans Day with BLM Vets and Youth

**Black Canyon City:** In a special 2013 Veterans Day commemoration, the BLM Phoenix District paired BLM military veterans with local youth in a 3-day field project that allowed staff to get outdoors, improve public lands, and serve as mentors. The field activities primarily took place at the Black Canyon City Heritage Park. The theme of the event was "Wellness and Prescription for Fun." Community members promoted hikes and rode trails from the park to the Black Canyon National Recreation Trail.



## LEARN

### Reenacting a Pioneer Journey with the Safford Field Office

**Greenlee County:** In spring 2013, large metal wagon wheels clanged against the rocky road at Gila Box Riparian National Conservation Area as modern-day reenactors climbed the

steep road out of the BLM Riverview Campground to begin a 3-day, 15-mile journey. Participants, dressed in traditional pioneer attire, pushed, pulled, and shouted words of encouragement as 30 loaded wooden pushcarts made their way up the hill. This reenactment, held every 4 years, commemorates Mormon pioneers' journey a thousand miles west to Salt Lake City in the mid-1800s.

### Hualapai Youth Rediscover Traditional Uses for Agave

**Lake Havasu:** Two BLM field office employees guided 16 members of the Hualapai Tribe to a site where ancients gathered agave, a succulent whose tubers were traditionally used for food, syrup, and bread flour, and for making a fermented drink. All residents of the Peach Springs Hualapai Indian Reservation, the participants included a tribal elder, an ethnobotanist, and 11 children ranging in age from 8 to 11. The group visited the site's roasting pits, habitation areas, and other important features. Tribal experts provided lessons on the region's four varieties of agave and their traditional uses and preparation, some of which they delivered in the Yuman language. The gathering site, which dates back to A.D. 300, was discovered by a BLM archaeologist in 2009 during a survey of the area.

### Take Me to the River

**Phoenix:** River Pathways, a nationally acclaimed, inquiry-based science education program coadministered by the Audubon Society (Audubon Arizona) and the BLM Phoenix District, connects local high school students to Arizona's riparian areas and science-based careers in natural resource management. With hands-on, classroom- and field-based programming in the Agua Fria National Monument, students are provided an interactive curriculum, field days on public lands, and paid student internship opportunities. During field days in 2013, students joined BLM resource specialists and Audubon staff in monitoring critical riparian habitat using the BLM/U.S. Forest Service Multiple Indicator Monitoring protocol.







## SERVE

### Wet & Dry Mapping Project

**Agua Fria:** This year marked the sixth annual Agua Fria River Wet/Dry Mapping event, during which volunteers mapped or charted water resources of the Agua Fria River and its tributaries during the hottest and driest time of year. Approximately 40 volunteers hiked through the riparian forest of the Agua Fria National Monument and mapped the presence or absence of water. The project provides a low-cost, comprehensive snapshot for monitoring flow conditions in the river. Data are used to support claims for federal water rights within the monument.

### New Bike Trail for Castle Rock

**Kingman:** The International Mountain Biking Association (IMBA), in cooperation with Kingman Field Office, hosted a trails training course for trail users. They presented information on sustainable trail building to a group of approximately 50 mountain bikers, equestrian users, hikers, and BLM staff. IMBA representatives, volunteers, and BLM staff constructed about 300 feet of new trail. The new connector loop for Castle Rock Trail is expected to be completed within the next year.

### Setting the Baseline for Invasives

**Paria Canyon:** Since 2008 the BLM and the Grand Canyon Trust have collaborated to remove invasive species from the Paria River, deep within the Paria Canyon-Vermilion Cliffs Wilderness. Grand Canyon Trust staff, along with six volunteers (including four youth), spent 8 days in early June 2013 backpacking through Paria Canyon and collecting such data as active channel widths, vegetation/ground cover, vegetation volume, soil texture/chemistry,

bird surveys, photo points, and beetle populations. The volunteers contributed 480 hours to the project.



## WORK

### Field-Certified Youth

**Phoenix:** Seven local youth enrolled in a 16-week Conservation and Resource Management Field Certification Program, earning their certifications and completing numerous field projects by May 2013. In one project they helped restore riparian habitat along the Agua Fria River. They also assisted with vegetation treatment for critical desert tortoise habitat in the Agua Fria National Monument. The field certification program is part of the BLM's Arizona Youth Initiative, which has engaged more than 30 urban youth in education and work projects in the state. Program graduates earn 12 credits in environmental courses at Phoenix College.

### Antelopes and Prairie Dogs

**Tucson:** An eight-person crew from the Southwest Conservation Corps worked for 3 months in the Las Cienegas National Conservation Area on pronghorn fence modifications in support of the Arizona Antelope Foundation's Southeast Arizona Grasslands Pronghorn Initiative. The crew also supported intensive observation and recapture efforts on four newly established prairie dog colonies in the area. Working with an Arizona Game and Fish Department biologist, the youth monitored the four colonies, performing daylight counts, capture, and re-marking of the animals. This education and employment project was one of more than a dozen BLM projects funded through the Developing the Next Generation of Conservationists grant program of the National Fish and Wildlife Foundation.

# California

*America's second-largest state is also one of the largest in the BLM. Education programs take advantage of the unique California desert and the spectacular California coastline. Recurring interpretive efforts include active participation in the annual Los Angeles County Fair. With renewable energy projects blossoming across the state, BLM energy education has become a top priority.*



## PLAY

### Wild Paws Dog Hikes

**El Centro:** In 2013 the BLM El Centro Field Office sponsored the first-ever series of Family Hikes with Dogs in the Indian Pass Wilderness. The program proved to be a great success, with more than 60 kids and families, along with their dogs, participating in winter and spring hikes in the desert wilderness.

### Not Just Any Day at the Beach

**Arcata:** Ocean Day, held in spring 2013, was part of a statewide program funded by the California Coastal Commission WHALE TAIL® Grants Program. Coordinated by Friends of the Dunes and the local BLM field office, the event provided participants with an interactive presentation focusing on marine debris.

### Public Lands Boot Camp Marches Forward

**Palm Springs - South Coast:** In the winter of 2013, 10 college interns participated in the Public Lands Boot Camp, where they learned about nature and survived many miles of adventure-filled—and often strenuous—hiking throughout the Coachella Valley. The participants worked alongside the BLM HIKE (Healthy Initiative for Kids in the Environment) crew, a cadre of young adults from the Palm Springs area. The interns left the boot camp in better physical health and with an improved understanding of why and how the BLM manages the public lands.



## LEARN

### Student Sign Project at Ocotillo Wind Energy Facility

**El Centro:** In June 2013 local third-grade students began the monumental task of placing thousands of tiny pieces of pre-cut glass and agate onto a template to create a sign for the Ocotillo Wind Energy Facility, which operates on public lands managed by the El Centro Field Office. The after-school art students created a mosaic depicting wind turbines, desert life, and the surrounding landscape. Later in the year, the wind facility celebrated its grand opening with the unveiling of the finished sign in front of the facility.

### Seymour Celebrates Memorial Day with Mules

**Bishop:** Bishop Field Office staff and Seymour Antelope, the costumed BLM mascot, participated in the annual Mule Days Celebration in Bishop over the Memorial Day holiday. The activity schedule featured a mule show, mule-packing competition, and Wild West show. Seymour was introduced to local children at the "I Want to Be a Packer" event, designed to encourage children to learn about mules and backcountry mule packing.

### Xtreme Summer Camp

**Barstow:** In August 2013 the Desert Discovery Center hosted a group of young learners from the Regional Occupational Science, Technology, Engineering, and Math (STEM) Program. Staff from the BLM Barstow Field Office and partner organizations conducted STEM-focused educational presentations, hands-on activities, field trips, and career exploration programs. Participants studied solar energy, Global Positioning System navigation, Geographic Information Systems, and desert wildlife, specifically the endangered Mohave tui chub.

### Girl Scouts Assist Museum with Collections

**El Centro:** The Imperial Valley Desert Museum in Ocotillo, California, houses thousands of BLM artifacts recovered from the El Centro Field Office management area. In 2013 the museum reached a significant milestone by completing the re-curation of all 20,000-plus artifacts under its care and





implementing a digital catalog. The effort engaged hundreds of volunteers and an entire Girl Scout troop, whose members have donated more than 3,000 hours to this project during the past 5 years.



## SERVE

### Recovering from Morongo Flooding

**Palm Springs - South Coast:** On the morning of August 26, 2013, the BLM Palm Springs - South Coast Field Office received notice that the Big Morongo Canyon Preserve had experienced major flooding after an evening of thunderstorm activity. The 31,000-acre site is an internationally recognized birding location and provides recreational opportunities within a preserve environment. The damage was so severe that the preserve had to be closed, with its trails and boardwalks buried in mud. Several volunteers, including seven soldiers from the 1<sup>st</sup> Battalion, 7<sup>th</sup> Marine Regiment, responded by helping to shovel mud, trim vegetation, and rebuild the boardwalk.

### Cleaning Up the Sacramento

**Redding:** The Shasta Geocachers' "Cache In Trash Out" volunteer event for Earth Day 2013 resulted in the removal of almost two tons of trash at an abandoned homestead adjacent to the Sacramento River Rail Trail. More than 25 volunteers assisted the BLM in removing tires, household trash, rubber hoses, a 2,000-square-foot can and bottle dump, metal pipe, scrap wood, and other assorted trash. This is the fourth year that the Geocachers have volunteered to clean up trash for the BLM Redding Field Office. "Cache In Trash Out" is a worldwide environmental initiative supported by the geocaching community in parks, forests, and on public lands.

### Surprise Fencing

**Surprise:** Members of the Backcountry Horsemen of California (BCHC) lent their expertise and horsepower

when the BLM Surprise Field Office was faced with the daunting task of replacing miles of wildfire-damaged fences in the High Rock Canyon Wilderness and the Little High Rock Canyon Wilderness of northwest Nevada. Since mechanized equipment use is prohibited in Wilderness, 10 members of the BCHC High Country Unit used 21 horses and mules to haul more than 40 loads into project sites. More than 3,000 pounds of wire—barbed, smooth, and woven—were hauled, along with fence posts, steel pipe, and fence stays.



## WORK

### Desert Trails

**Barstow:** Through a long-standing partnership between BLM-California and the Student Conservation Association, Desert Restoration Corps crews fanned out across the California Desert District to work on a variety of restoration and other projects. From building and maintaining trails to marking off-highway vehicle routes, crews also helped to preserve habitat for a variety of desert species. Often working in remote areas, crews came together in February 2013 for an All Corps project to improve access on 7 miles of multiple-use trails along the Amargosa Wild and Scenic River.

### Award-Winning Archaeological Research

**Barstow:** In January 2013 BLM archaeologist technician Amy Oechsner was awarded First Runner Up for her research presented at the annual meeting of the Archaeological Institute of America. Among her accomplishments was officially documenting a "lost" section of the Old Spanish Trail. Amy located it using a combination of digital aerial images, Geographic Information Systems, and information from archeological artifacts found along the missing section of the trail.





# Colorado



*Colorado's 8.3 million acres of BLM public lands are concentrated primarily in the western portion of the state. The BLM partners with many environmental education providers, state and federal agencies, and local schools and universities. Cultural education facilities such as the Anasazi Heritage Center interpret the fascinating story of the Southwest, and an outstanding volunteer program benefits from statewide partnerships.*



## PLAY

### BLM and Colorado Canyons Association Team Up To Teach Local Kids

**Grand Junction:** In spring 2013 the BLM Grand Junction Field Office and Colorado Canyons Association completed a 4-day event at McInnis Canyons National Conservation Area (NCA) aimed at helping children appreciate and respect the natural environment. Children participated in a scavenger hunt with 10 stations, where they learned about plant and animal species, cultural history, and sensitive environmental features. For many children, this was their first trip into McInnis Canyons NCA. The annual program has significantly raised outdoor participation by local children.

### Service-Oriented Adventure Hike for Local Youth

**White River:** BLM staff led local youth ages 9–11 from the Meeker Recreation Center in Rio Blanco County on a service-oriented hiking adventure to teach public land stewardship in summer 2013. The hikes allowed youth to experience the White River Valley and surrounding area, and to learn about pursuing healthy lifestyles through activities other than traditional sports.



## LEARN

### Ancient "Skywatchers" at the Anasazi Heritage Center

**Dolores:** During the winter season, the BLM Anasazi Heritage Center hosted "Ancient Skywatchers of the

Southwest," an exhibit showcasing photos of prehistoric astronomical markers in the Four Corners region of the West. The images were the work of explorer and photographer John Ninnemann, who held an opening-day book signing. He also lectured on the Ancestral Puebloan tradition of the "skywatcher," the importance of astronomy in the early Southwest, and significant alignments of the Sun and Moon that marked important points of the Puebloan year. "Ancient Skywatchers of the Southwest" was produced by the museum at Fort Lewis College's Center of Southwest Studies in Durango.

### Natural Teaching

**San Luis Valley:** During the winter of 2012–13, Colorado Parks and Wildlife joined the BLM, U.S. Fish & Wildlife Service, U.S. Forest Service, and 14 school districts in developing the San Luis Valley T.E.N. (Teaching Environmental Science Naturally) program. The program aims to give teachers the tools, skills, and curriculum necessary to provide students with a quality environmental science education experience. The Penitente Canyon curriculum focuses on the area's cultural and geologic features, including La Garita Caldera, the remains of a volcano thought to have produced the largest known explosive eruption in the Earth's history.

### Project Archaeology Returns to Colorado

**Statewide:** In November 2012, Project Archaeology coordinators in Colorado trained 19 teachers in archaeological stewardship at a workshop in Broomfield. It was the first Project Archaeology workshop in Colorado since 2007 and marked the beginning of a broad, statewide effort to introduce Project Archaeology to teachers in the Denver metro area and eventually throughout the rest of the state. In the summer of 2013, the Colorado Council of Professional Archaeologists agreed to sponsor Project Archaeology, providing a much-needed partnership to sustain the program in Colorado.





## SERVE

### Perfect Record on Horse Adoptions

**Grand Junction:** Forty members of the Friends of the Mustangs (FOM) assisted the BLM with the 2013 Little Book Cliffs wild horse gather, during which bait/water trapping was used for the first time. Volunteers hauled bait and water to selected sites, monitored horses using motion cameras, built and removed temporary traps, identified horses, and trapped and loaded horses. FOM members also cared for the horses at the holding facility for nearly a month. All wild horses were adopted along with burros brought in from Nevada.

### Warfighters Become Interns in Kremmling

**Kremmling:** In early spring, the Kremmling Field Office participated in the Operation Warfighter internship program. This Department of Defense program places wounded, ill, and injured service members in supportive work settings. Sergeant Tyler Morrison and Sergeant Anthony Watson, based at Fort Carson, Colorado Springs, each worked more than 200 hours in the BLM Recreation Program and also helped in the Fire and Fuels Program.

### Heavy-Duty Cleanup

**Colorado River Valley:** Approximately 60 volunteers removed nearly 10 tons of garbage from the Fravert Reservoir and Hubbard Mesa area located northwest of Rifle, Colorado. The cleanup was a cooperative effort among High Country 4-Wheelers, the BLM, and a host of other local businesses and off-highway vehicle groups. Volunteers from the construction industry also helped with heavy equipment, including backhoes, skid steers, bulldozers, dump trucks, and flatbed trailers.

trails" in the Hartman Rocks Recreation Area. The trails, designed with the assistance of the Adaptive Sports Center in Crested Butte, can accommodate hand cycles and will provide much-needed opportunities for recreation and rehabilitation for wounded veterans and other disabled individuals.

### Surveying Sediment

**Gunnison:** A GeoCorps intern conducted paleontological surveys of Upper Jurassic and Lower Cretaceous sediments in the Gunnison Gorge National Conservation Area, culminating in the presentation of project data at the annual meeting of The Geological Society of America in November 2012. The intern also contributed to the development of an interpretive poster on paleontological resources of the area.

### Vets Share Fire Skills

**Little Snake:** The Rocky Mountain Youth Corps Veterans Fire Crew saw plenty of action during the summer of 2013. Crewmembers put their fuels mitigation and wildland fire training to good use, not only on fuels reduction projects but also on managing the 50-plus acre Kodiak fire near Maybell. Two fire squads were composed of veterans as well as Youth Corps members (non-veterans). The vets shared their skills and experience with the non-veteran squad members while readjusting to civilian life.



## WORK

### Trails for Hand Cycles

**Uncompahgre:** A veterans crew engaged through the Western Colorado Conservation Corps joined with volunteers and other partners to retrofit and build 3 miles of "wide





## Eastern States

*The BLM-Eastern States Office manages scattered public lands and substantial federal mineral estate in the 31 states east of and bordering the Mississippi River, including a number of sites with active education, volunteer, and youth programs. For many years, the BLM-Eastern States Office has helped introduce underserved urban youth to the outdoors. More recently, the Northeastern States Field Office partnered with several organizations in Wisconsin to restore islands in the Milwaukee River.*



### PLAY

#### River Adventure and Canoe Training

**Milwaukee, WI:** In the summer of 2013, BLM staff provided a unique river adventure to 15 teenagers affiliated with the Neighborhood House, a nonprofit community center in Milwaukee. The kids learned outdoor skills and basic canoeing techniques. For most, it was their first visit to a river and first time being in boats.

#### Let's Move Outside D.C.

**Lorton, VA:** From fall 2012 through 2013, urban youth from Washington, D.C., participated in 50 Let's Move Outside activities at the BLM Meadowood Special Recreation Management Area. They camped, biked, boated, sailed, went scuba diving and snow tubing, swam, ice skated, kayaked, canoed, and hiked. These were exciting adventures for the youth, most of whom had never been outside of Washington, D.C.



### LEARN

#### Kids Meet "Jack, the Horse"

**Jackson, MS:** The Southeastern States Field Office partnered with Copiah County, Mississippi, and state and federal agencies to offer a day of outdoor exploration for local elementary school students. BLM staff introduced the kids to Jack, formerly a wild horse and now serving as a BLM ambassador to the public. Many of Jack's new friends had never touched a horse before. All of the day's activities were focused on "seeing, hearing, touching, and doing."

#### Team Wood Thrush

**Lorton, VA:** More than 30 English-as-a-second-language students from Hayfield, Virginia, paid a spring visit to the BLM Meadowood Special Recreation Management Area to join members of a Virginia Audubon Council for an educational bird walk in the woods. Students, teachers, and BLM staff traveled the Wood Thrush Trail and listened for birdsong. Binoculars raised, young birders searched for wood thrushes, pileated woodpeckers, blue jays, and other species. Students were able to identify many of the calls they heard. Virginia Audubon members are frequent visitors to Meadowood's 15 miles of trails and have developed surveys for the area's bird species.







## SERVE

### MORE Bike Trails

**Lorton, VA:** The Mid-Atlantic Off-Road Enthusiasts (MORE) and the BLM-Eastern States Office have entered into the next phase of their partnership to complete 2.5 miles of unique mountain bike trails at the Meadowood Special Management Recreation Area. A BLM recreation technician served as the project leader and designed and built the trails with a rider's progression in mind, allowing for different challenges as a rider's skill develops.

### National Public Lands Day at Jupiter

**Jupiter, FL:** Approximately 50 volunteers provided more than 200 hours of volunteer service on National Public Lands Day to benefit the Jupiter Inlet Outstanding Natural Area (ONA) and introduce community members to BLM-administered public lands on the southeast coast of Florida. Activities included trash pickup in the ONA and along portions of its shoreline, and collection of mangrove propagules to be grown offsite for use in wetland restoration projects in the ONA and other places.

### Milwaukee River Island Restoration

**Milwaukee, WI:** The BLM Northeastern States Field Office (NSFO) has provided undergraduate students serving with the Center for Community-Based Learning, Leadership, and Research at the University of Wisconsin-Milwaukee with meaningful opportunities for public service and leadership. Students have been engaged in controlling invasive plant species, planting trees and native plant seeds, picking up garbage, and installing birdhouses on a few of the islands

in the Milwaukee River. Through the partnership, the university fulfills its commitment to public service, and the BLM NSFO engages the next generation of leaders in conservation projects and public lands stewardship. In 2013 participants restored a 180-acre island that was once dominated by a partially wooded habitat known as savanna. Savannas are one of the most endangered habitat types in the world and are especially important to resident and migratory birds.



## WORK

### Potomac Heritage Improvements

**Charles County, MD:** Crewmembers from the Maryland Conservation Corps and the Conservation Job Corps built split-rail fences and a small bridge, while pruning back branches from a trail at the BLM Douglas Point Special Recreation Management Area along the Potomac River. Further improvements to the river access point included construction of a 250-foot-long puncheon bridge over a segment of the Potomac Heritage National Scenic Trail.

### Island Inventory

**Milwaukee, WI:** In the Northeastern States Field Office, BLM partner Operation Fresh Start received a Developing the Next Generation of Conservationists grant from the National Fish and Wildlife Foundation, which funded an inventory of more than 20 BLM-managed islands in the Wisconsin River. Following training in canoe handling/safety and plant identification, about a dozen youth from urban areas paddled from island to island to map plant communities on more than 500 acres.



# Idaho

*Spectacular river gorges, mountain ranges, and desert landscapes make Idaho an outstanding source of outdoor education and recreation for individuals of all ages. The BLM-Idaho State Office partners with many education providers, state and federal agencies, and local schools to provide programs about the state's outstanding natural and cultural resources. As part of Be Outside, BLM-Idaho encourages Idahoans to lead healthy lives and develop a sense of place in the outdoors.*



## PLAY

### Paddles on the Snake River

**Bruneau:** BLM-Idaho employees shared lifetime outdoor experiences with students on the Snake River in fall 2012. Guided by BLM staff, young boaters on two rafting expeditions began each day at Swan Falls Dam and ended at Celebration Park. It was the first time many of the youth had ever floated in a raft or visited the Snake River. BLM wilderness river rangers taught the participants about the importance of boating safety.

### Ice Fishing for Trout

**Salmon:** In winter 2013 the Salmon Field Office cohosted the 22nd annual Salmon Kids' Ice Fishing Derby at Hyde Creek Pond, where 59 children ages 1–15 participated. More than 300 rainbow trout were caught during the 4-hour derby. Kids who caught the biggest fish were awarded fishing rod-and-reel combos and tackle boxes donated by the Idaho Department of Fish and Game.

### Lava Trail Adventure Walk

**Upper Snake River:** Staff from the Upper Snake Field Office accompanied 13 local youth and instructors on an adventure walk on the Hell's Half Acre Lava Trail (now known as the Lava Trail System). The trail runs along the easternmost portion of the basaltic lava fields on the Snake River Plain, an expansive crescent-shaped depression that stretches across southern Idaho. The lava walk was part of

a week-long summer science adventure camp focusing on the ecology, geology, and history of the area.



## LEARN

### Migrating Bald Eagles Put on a Show for Military Families

**Coeur d'Alene:** In the fall of 2012 more than 150 military veterans and active-duty personnel and their families embarked on Lake Coeur d'Alene cruises to view the annual southward migration of bald eagles. BLM staff, in cooperation with the Idaho Department of Fish and Game and Lake Coeur d'Alene Cruise Boats, hosted two Veteran's Eagle Watch Cruises for representatives from all branches of the military. Cruise participants spotted approximately 90 bald eagles that day.

### Salmon Valley Stewardship

**Salmon:** The Salmon Field Office worked with the nonprofit Salmon Valley Stewardship and Salmon Idaho Mountain Bike Association to provide learning and experiential opportunities for area youth and their teachers. At Discovery Hill, a BLM recreation site, students created a 1.6-mile "podcast trail," narrating segments on topics ranging from peregrine falcons to the journey of Lewis and Clark. In winter, students traveled Salmon-area public lands on cross-country skis, learning about animals' winter adaptations along the way.

### Outdoor Bug Classroom

**Challis:** In April 2013 students from Challis Elementary School in Idaho were entertained and educated with bugs and rocks by BLM Challis Field Office employees for Natural Resource Day. Nearly 185 students from kindergarten to sixth grade rotated through six classrooms set up by community natural resource professionals. Students used tweezers to "search for," capture, and transfer live aquatic insects from sample pans into ice cube trays.







## Sustainable Management Challenge

**Shoshone:** Field office staff participated as advisors in the 2013 Envirothon State Competition at the Living Waters Ranch in Challis. Twenty-three high schools from around the state fielded five-student teams to compete in the environmental education challenge, which focused on the theme, “Sustainable Rangeland Management.” The teams were challenged to plan for multiple use of rangelands in sage-grouse habitat.

## Youth Outdoor Day Camps

**Coeur d’Alene:** In summer 2013 the Coeur d’Alene Field Office hosted Youth Outdoor Day Camps, where 250 elementary and high school kids participated in hands-on and classroom-style learning. Highlights included outdoor educational activities centered around wildlife and habitats, ecosystems, fisheries, and birds.



## SERVE

### High School Students “Scatter Like Buckshot” To Plant Sagebrush

**Twin Falls/Jarbridge:** Eager to start digging in the dirt and planting, 118 high school students “scattered like buckshot” to plant sagebrush over nearly 50 acres of rangeland that had burned in the Cave Canyon Fire in summer 2012. BLM staff and students planted more than 5,000 sagebrush seedlings in a 3-hour period. Staff from the BLM-Idaho Twin Falls District Office and Jarbridge Field Office provided guidance, encouragement, and plenty of digging power.

## Cleaning up the Caves

**Shoshone:** In 2013 the Silver Sage Grotto and Gem State Grotto clubs provided a crucial volunteer workforce

in support of the extensive cave program of the BLM Shoshone Field Office and Craters of the Moon National Monument. Approximately 70 volunteers assisted in cleanup projects, cave gate repair, and monitoring of wildlife and special cave resources. Volunteers also guided numerous cave trips to provide education, interpretation, and Leave No Trace ethics programs for the public.

## North Rim Cleanup

**Shoshone:** Volunteer partners teamed up with BLM employees for the 15<sup>th</sup> annual Great American Cleanup of the North Rim of the Snake River. The Southern Idaho Off-Road Association began this project as a way to create goodwill among recreational users of the North Rim and help ready the area for off-roading and rock crawling sports. More than 100 tons of trash were removed the first year and 20-plus tons were removed in 2013, visibly improving more than 10,000 acres of urban-interface public lands.



## WORK

### Planning on the Upper Snake

**Idaho Falls:** Two student interns from the University of Idaho were hired to gather and analyze recreation data associated with planning efforts in the Upper Snake River Field Office area. The internship program, established through a Cooperative Ecosystem Studies Unit (CESU) agreement with the university, provides interns with on-the-ground resource management experience while also helping the BLM manage public lands more effectively.

## Canyon Videos

**Cottonwood:** An intern from Oregon State University (OSU) was hired by the Cottonwood Field Office to develop videos about archaeology along the Salmon River Canyon. For several years, students have been excavating the site, which contains some of the earliest evidence of humans in the Pacific Northwest. The videos, which are posted on YouTube, document archaeological excavation techniques and educate the public about cultural resources in the area.



# Montana/Dakotas

*Explorers Lewis and Clark traveled through Montana more than two centuries ago, but their enthusiasm for exploration and learning continues through dozens of BLM programs in education and youth engagement. With the Montana Conservation Corps, BLM has been able to complete projects ranging from noxious weed control to cultural resource inventories. And Project Archaeology, a heritage education program coordinated under a BLM partnership with Montana State University, offers teacher workshops nationwide.*



## PLAY

### ROCKS Takes It Outside

**Miles City:** During summer 2013, ROCKS Childcare program, a local nonprofit group in Miles City, brought 38 local kids, ages 4–12, to the local BLM field office to learn about various natural resources. Specialists presented on topics such as recreation, wildland fire, range, aquatics, and archaeology. Most of the children do not have regular opportunities for outdoor activity and enjoyed learning about the natural world.

### Icy Cold Fun

**Havre:** The local BLM field office hosted the Hooked on Fishing ice fishing event for area youth. Kids spent a winter day outside learning ice fishing skills and fish identification, enjoying themselves despite cold temperatures and cold fingers.



## LEARN

### Geocaching by Boat

**Fort Benton:** Staff from the Upper Missouri River Breaks National Monument developed a river-based EarthCache Trail, which runs from Judith Landing to Kipp

Landing. The trail uses Global Positioning System receivers to lead students on an exploration of geologic features throughout the monument. The sites along the unique EarthCache Trail do not use buried containers or trinkets; instead, the “treasures” are the lessons learned about the natural resources of the monument.

### Wildfire Education Day a Success with Agency Mascots and Hands-on Activities

**Malta:** In spring 2013 approximately 350 students from kindergarten through sixth grade participated in hands-on HiLine Wildfire Education Day activities to learn about wildland fire ecology, firefighting, and how to prevent human-caused fire. Students rotated through ten different educational stations, covering such topics as fire prevention, air operations, historic use of fire, and fire behavior. Costumed BLM mascot Seymour Antelope and costumed U.S. Forest Service mascot Smokey Bear showed up to encourage the kids.

### Aaniih Nakoda College Archaeological Inventory Class

**HiLine:** In partnership with the Fort Belknap Tribal Historic Preservation Office and Aaniih Nakoda College, the BLM HiLine District presented a 3-day Archaeological Inventory and Methods class, introducing students to the discipline of archaeology and archaeological survey methods. Presentations emphasized linear thinking and analytical methods. Students learned how to explain and demonstrate basic methods and techniques of archaeological survey.

### Project Archaeology Takes on the Battle of the Rosebud

**State Office:** In June 2013 Project Archaeology coordinators from Montana and Wyoming cohosted a workshop and teacher field school at the Battle of the Rosebud site in southeastern Montana. Ten teachers were selected to attend the Rosebud Institute, which was supported by the BLM-Wyoming State Office. Other partners included Montana State Parks and Wildlife, Sheridan College, and the Sheridan Historical Museum. The Rosebud Battlefield was the site of a battle between Lakota and Cheyenne warriors, led by Crazy Horse, and the U.S. cavalry and infantry, led by General George Crook, on June 17, 1876. The team investigated battle dynamics and perspectives through the study of artifacts.





## SERVE

### Dry Head Cultural Resources Inventory

**Billings:** The Dry Head Overlook in the Pryor Mountains is one of the most respected and sacred places known to the Apsáalooke (Crow) Indians. In 2013 a partnership was developed among the BLM Billings Field Office, Custer National Forest, and the Crow Tribal Historic Preservation Office to inventory, identify, and record important cultural features of the overlook. The partnership involved hiring a Crow student as a BLM summer seasonal employee, and working with three Crow monitors provided by the Crow Tribal Historic Preservation Office. These efforts resulted in a formal National Register nomination for the site.

### Young Offenders Volunteer for Restoration Projects

**Miles City:** Through a joint effort with the Pine Hills Youth Correctional Facility, the BLM Miles City Field Office coordinated volunteer assistance for maintenance tasks at Mathews Recreation Area in southeastern Montana. The program gives facility youth the opportunity to fulfill their required community service hours, or simply volunteer to help with different projects. A screening process considers each youth's offense, length of stay, escape risk, and current program compliance. In 2013, the correctional facility supervised 28 students, who assisted the BLM with 115 hours of trash collection, weed control, mowing, and other general maintenance.



## WORK

### MCC Crews Are Everywhere!

**Statewide:** In 2013 Montana Conservation Corps (MCC) crews engaged in a wide range of projects benefiting multiple resources and locations. From noxious weed control in the Buffalo Creek Wilderness Study Area to riparian planting at Fort Meade Reservoir in South Dakota,

crews were able to complete more than 13,000 hours of work throughout Montana and the Dakotas during the year.

### ...Including the Northern Prairie!

**Billings:** A statewide assistance agreement with MCC was enhanced with grants from the National Fish and Wildlife Foundation. Thanks to grants received in 2012 and 2013, MCC crews have been engaged in Russian olive eradication and invasive species inventory projects in the Upper Missouri River Breaks National Monument, as well as aspen restoration and other habitat improvement projects in the northern prairie. In addition, crews composed of urban, rural, and tribal youth were involved in conservation projects in numerous places traveled by Lewis and Clark more than 200 years ago.

### SCA Interns at the Monuments

**Billings/Lewistown:** Interns from the Student Conservation Association assisted with education and interpretation programs at two BLM national monuments in Montana—Pompeys Pillar and Upper Missouri River Breaks. The interns also helped develop a recycling program for the Pompeys Pillar interpretive center. A summer GeoCorps intern developed a geocache trail highlighting the unique geological features of the Upper Missouri River Breaks monument. Another geocache trail will be developed in summer 2014.

### Tribal Intern Works on Projects from Wildlife to Protection

**Missoula:** A partnership between the BLM and the Confederated Salish and Kootenai Tribes provided internship opportunities for work experiences in diverse BLM programs, including wildlife management, cultural resources management, and visitor management. In the summer of 2013 an intern in the Missoula Field Office worked on several wildlife monitoring, inventory, education, and protection projects. Funding through executive orders and special emphasis programs, as well as BLM Youth Program funds, supported this partnership.





# Nevada



*Working with partners such as the Great Basin Institute, BLM-Nevada promotes education, research, and service on the public lands. At the Red Rock Canyon National Conservation Area, for example, a state-of-the-art visitor center hosts outstanding education and interpretive programs. And the Black Rock Playa is the site of some of the most amazing Leave No Trace projects in the United States, including the world-famous Burning Man Festival.*



## PLAY

### Scouts Assist with Sage-Grouse Protection Project

**Elko:** About a dozen Scouts from Elko's Boy Scout Troop 820 participated in an Eagle Scout project to protect Greater Sage-grouse from fences surrounding the Spanish Ranch, north of Elko. Zach Daniels, a 16-year-old on a quest to become an Eagle Scout, organized the project with BLM staff. Daniels coordinated with the BLM and Ellison Ranching Company to have 5,400 flight diverters installed on 5.6 miles of livestock control fencing.

### Getting Back on Track...

**Red Rock/Sloan:** The BLM Red Rock/Sloan Field Office hosted Back on Track for 230 teens in 2013. Back on Track is a year-round program that introduces troubled teens on parole or probation to their public lands. The teens complete community service requirements by participating in service projects, while also having fun hiking, horseback riding, and spending evenings around a campfire under star-filled skies. Most of the youth have never spent time outdoors on public lands.

### Youth Range Camp

**State Office:** In summer 2013, 25 youth ages 14–18 attended the BLM- and partner-supported Nevada Youth Range Camp, operated by the Society for Range Management. The camp provides teenagers with an

opportunity to learn about and experience Nevada's desert and mountain rangelands firsthand. Students learned basic surveying and map reading, as well as wildlife surveying techniques. The kids also had fun swimming, hiking, and boating.



## LEARN

### New Exhibit at California Trail Center

**Elko:** The latest historical exhibit at the BLM-managed California Trail Interpretive Center was unveiled in April 2013. An informal ribbon-cutting ceremony preceded the official "opening" of the new murals, which depict the experience of Great Basin Native American peoples from the time they first encountered covered wagons to the present day. Approximately 50 guests attended, including tribal elders, artists, and BLM staff from the Elko area.

### Wild Experiences Close to Home

**Las Vegas:** Red Rock Canyon National Conservation Area (NCA) provides both staff-facilitated experiences and teacher-led programming. Teachers are offered resources and training, both in person and through distance learning programs, which allow them to reach curriculum-related goals and guide outdoor classroom experiences in the NCA. The BLM works with schools from the Clark County School District, one of the largest in the nation, as well as private schools and home school groups, to provide students with outdoor learning experiences close to home.

### Lovelock Cave Days

**Winnemucca:** BLM-Nevada's eighth annual Lovelock Cave Days celebrated in May coincided with Nevada's Archaeological Awareness and Historic Preservation Month. More than 300 fourth-graders from six Humboldt and Pershing County elementary schools assembled to celebrate local Nevada history. BLM employees, BLM retirees, other volunteers, and partner organization



representatives staffed 12 interpretive stations. Paiute Indians from the Lovelock tribe, and Paiute-Shoshone Indians from the Fallon and Fort McDermitt tribes, treated the children to Native American cultural presentations.



## SERVE

### Black Rock Rendezvous-ers Leave No Trace

**Winnemucca:** The 2013 Black Rock Rendezvous, a Leave No Trace camping event, attracted approximately 200 people, who spent Memorial Day weekend on the west edge of the Black Rock Playa. Participants included members of the Friends of the Black Rock High Rock, Nevada Outdoor School, and Friends of Nevada Wilderness. Volunteer projects included the removal of fencing from a fire restoration project and an ongoing, citizen-science spring-monitoring project.

### Seeds of Success National Public Lands Day Project

**Carson City:** At Washoe Lake State Park's National Public Lands Day event, volunteers and BLM employees collected native seed for Seeds of Success, an interagency partnership program that collects and stores seeds for restoration and research purposes. Volunteers were instructed in proper seed collection techniques, and told which plant species to target for collection. Between the volunteers and BLM employees, more than 20,000 seeds were collected from rabbitbrush and curly-cup gumweed.

### Replanting Burned Land in Nevada

**Winnemucca:** More than 8,000 tiny bitterbrush and sagebrush plants are dotting the landscape on a swath of burned public land in the Black Rock Playa-High Rock Canyon Emigrant Trails National Conservation Area, thanks to the efforts of 16 volunteers. The volunteers were part of a crew of 27, including BLM staff, who worked for 2 days in mid-November to plant the seedlings on public lands scorched in the 2012 Lost Fire. The planting project was a cooperative effort of the BLM, Nevada Department of Wildlife, Friends of Nevada Wilderness, and Friends of Black Rock High Rock.



## WORK

### Bootstraps and Chainsaws

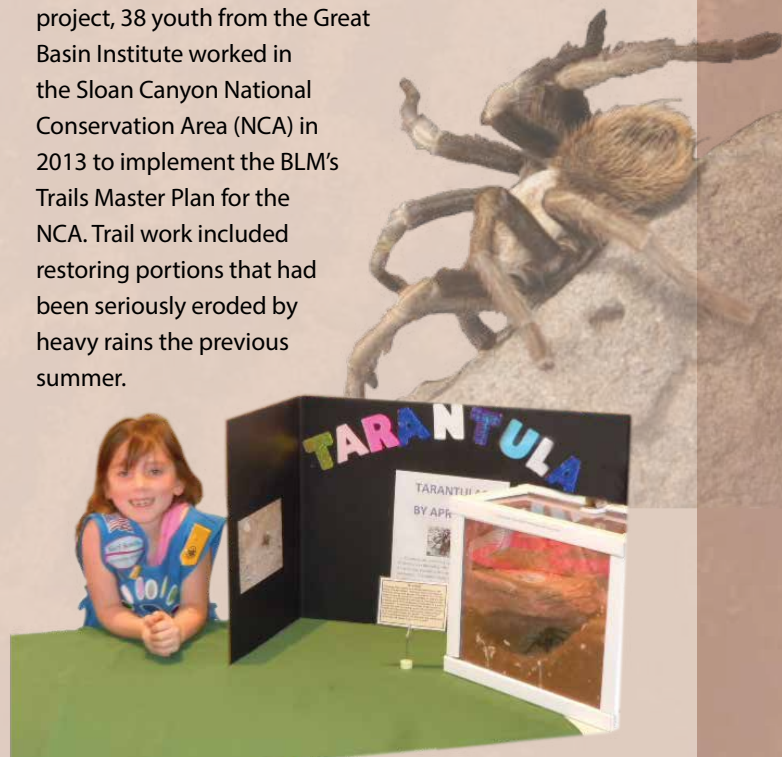
**Reno:** The University of Nevada - Reno's Cooperative Extension Bootstraps Program received one of the Secretary of the Interior's 2013 Partners in Conservation awards, recognition for a long-standing BLM partnership with the Nevada State Office that has provided work and training opportunities for some 150 at-risk youth since 2005. Bootstraps participants used chainsaws to control more than 1,000 acres of piñon-juniper trees in priority sage-grouse habitat. Checking the spread of this plant has helped to enhance known breeding, nesting, brood rearing, and wintering sage-grouse habitats and has reduced wildfire severity.

### 25,000 Trees at Lake Tahoe

**Carson City:** A crew from the Nevada Conservation Corps, along with Conservation and Land Management interns, planted some 25,000 year-old Jeffrey pine seedlings as part of a fire rehabilitation project south of Lake Tahoe. The work took place on both BLM and county lands and was supported in part by a grant from Global ReLeaf, a program of the nonprofit American Forests.

### Sloan Canyon Restoration

**Red Rock/Sloan:** As part of a 2-year project, 38 youth from the Great Basin Institute worked in the Sloan Canyon National Conservation Area (NCA) in 2013 to implement the BLM's Trails Master Plan for the NCA. Trail work included restoring portions that had been seriously eroded by heavy rains the previous summer.





# New Mexico/Oklahoma/Texas

*BLM-New Mexico offers a wide range of programs to educate and engage public lands visitors. Programs at the El Malpais National Conservation Area and the Prehistoric Trackways National Monument encourage students to explore nature and fossils. Youth partnerships with organizations in Santa Fe, Albuquerque, and elsewhere reach underserved and disadvantaged youth.*



## PLAY

### Horse Camp for Incarcerated Youth

**Georgetown, TX:** In spring 2013 the BLM Oklahoma Field Office and the Mustang Heritage Foundation cohosted Camp Wildfire, a 2-day camp for incarcerated students from the Williamson County (Texas) Juvenile Detention Center. Fifteen campers ages 15–17 attended the camp, located in Georgetown, Texas, where they spent hands-on time with horses and worked with a local mustang trainer. The campers also participated in painting activities, leather tooling, and a presentation by the trainer.

### Night Hikes

**Rio Puerco, NM:** BLM staff from the Rio Puerco Field Office offered unique and adventure-filled summer Family Night Hikes, geared to get children out hiking after dark—without flashlights—to experience the outdoors using senses other than vision. More than 105 participants enjoyed a one-of-a-kind experience navigating trails and rocky terrain in the dark.



## LEARN

### Cave Video Simulation and Game

**Roswell, NM:** The Fort Stanton Cave Study Project, in partnership with the BLM Fort Stanton - Snowy River Cave National Conservation Area, created a video simulation and educational/interpretive video game based on the

Snowy River Passage in Fort Stanton Cave. This media piece showcases 12 miles of the longest cave passage in the world, including the unique calcite formation—the “snowy river”—that makes up its floor.

### Art Walks and More at El Malpais

**Grants, NM:** In 2013 BLM staff at El Malpais National Conservation Area (NCA) presented 130 interpretive outreach programs to nearly 2,300 people. Among the highlights were monthly Art Walks, during which BLM park rangers accompanied art and photography enthusiasts into the NCA. There, they set up easels or brought out cameras and let nature inspire them.

### Guided Hikes, Summer Presentations, and Junior Explorer Art

**Las Cruces, NM:** In the course of developing a BLM Junior Explorer activity program and booklet for the Dripping Springs Natural Area, the BLM Las Cruces District Office commissioned artist Lorenzo Moreno to create ink and watercolor paintings of the area’s vegetation and wildlife. Moreno’s 15 impressive illustrations were featured in a winter art display at the Las Cruces Museum of Nature & Science.

### First Teacher on the Public Lands

**Las Cruces, NM:** In 2013 the BLM’s first Teacher on the Public Lands, Eileen Davis, took up residence at Prehistoric Trackways National Monument. She visited several sites within the BLM Las Cruces District to learn about the area’s diverse resources and complex management issues. Then, with monument staff, she developed educational programs and a curriculum for use in both traditional educational settings and the monument’s outdoor classrooms.

### North Texas Conservation Biology

**Amarillo, TX:** Sixty-one Caprock High School students attended a six-station outdoor classroom at the BLM Cross





Bar Management Area to explore the complexities of conservation biology. Students particularly enjoyed a radio telemetry activity in which they learned to track lesser prairie chickens. Participants also helped count birds, handled skulls and skins, observed snakes, and caught fish with a net. The Cross Bar is part of a local initiative to evaluate the benefits of learning in outdoor settings.



## Archaeological Adventure Lessons

**Oklahoma & Texas:** The BLM Oklahoma Field Office vastly expanded its archaeological outreach program in 2013 by conducting several events in rural and underprivileged areas throughout Oklahoma and Texas. Hundreds of school children participated in lively, outdoor, hands-on archaeological adventure lessons. There were interactive demonstrations of prehistoric hunting techniques and lessons on archaeological site stewardship. Students were encouraged to interpret the past from direct contact with artifacts.



## SERVE

### Take Pride in America Awardee

**Roswell, NM:** Longtime volunteer Jim Cox was presented the prestigious Take Pride in America® National Volunteer Award by Roswell Field Office Manager Chuck Schmidt. As part of his volunteer work for the Fort Stanton Cave Study Project, Jim fabricated stainless steel panels for the cave's Don Sawyer Memorial Hall/Mud Turtle Dig Shaft, and assisted the BLM with gate building and video production.



## WORK

### Signs for the New Monument

**Taos, NM:** Crewmembers from the Rocky Mountain Youth Corps (RMYC) assisted the Taos Field Office with installing signs in the new Rio Grande del Norte National Monument. The crew of nine constructed bases for entry signs as well as information kiosks in and adjacent to the monument. Another RMYC crew thinned some 33 acres of juniper and piñon pine and constructed enclosures to protect aspen regeneration in the treatment area. This project was completed on New Mexico State Land Office lands adjacent to BLM lands and funded through a National Fish and Wildlife Foundation grant.

### Hazardous Fuels Reduction

**Taos, NM:** The Chimayo Youth Conservation Corps conducted a forest treatment project for reducing hazardous fuels on approximately 75 acres of BLM lands adjacent to private and U.S. Forest Service lands in the Canjilon area. This project was funded through a grant from the Collaborative Forest Restoration Program. Corps members also began work on a 680-acre motorized and nonmotorized park in the La Puebla Special Recreation Management Area on BLM lands. This project is funded through a Recreational Trails Program grant, a Federal Highway Administration program administered through New Mexico State Parks.

### CAMP Interns

**Albuquerque, NM:** First-year college students from the University of New Mexico's College Assistance Migrant Program (CAMP) worked as BLM interns to gain experience in public lands management and to assist with BLM projects. Interns worked in a variety of BLM programs, including archaeology, fire management, fisheries, forestry, Geographic Information Systems, range, realty, recreation, and wildlife.

### Youth Works in Santa Fe

**Santa Fe, NM:** In partnership with the BLM New Mexico State Office, Santa Fe ¡YouthWorks! formed a workcrew of 15 youth who worked on environmental stewardship projects in northern New Mexico in 2013. Funded through a National Fish and Wildlife Foundation grant, projects included wildfire prevention, informational kiosk building and installation, fence removal and installation, trail construction, and invasive species removal.



# Oregon/Washington

*BLM-Oregon/Washington maintains several innovative partnerships with schools, focusing on educational programs in areas from history and culture to forestry, fisheries, and watersheds. Two exceptional sites are Yaquina Head Outstanding Natural Area near Newport and the National Historic Oregon Trail Interpretive Center in Baker City. The BLM operates school programs in nearly a dozen district and field offices throughout the Pacific Northwest.*



## PLAY

### Winter Tide-Pooling Event

**Wenatchee, WA:** At a winter tide-pooling event in Washington's newly designated San Juan Islands National Monument BLM staff, in partnership with Indian Island Marine Health Observatory volunteers, shared the wonders of the intertidal zone with 36 students from the Orcas Island Elementary Science Club. Students discovered many sea creatures and learned about the relationships between marine and terrestrial habitats. In addition to learning Leave No Trace principles, students gained an understanding of Indian Island's role as part of the national monument.

### RAP Camp – Class Is Outside Today!

**Roseburg, OR:** In the summer of 2013, 146 youth spent a week at Resources and People (RAP) Camp on Lake of the Woods, learning about the diverse natural resources that make up an ecosystem. The youth spent their days on field trips and participating in hands-on outdoor activities in disciplines such as cultural resources, fire, forestry, geology, and wilderness.

### From Skyscrapers to Forests

**State Office:** The Inner City Youth Institute is a partnership among the BLM, Oregon State University, and the U.S. Forest Service. Each spring the partners cohost an annual Natural Resources Camp. The camp introduces inner-city

youth to nature and provides a safe atmosphere in which the students can develop leadership skills, gain confidence, and hone teamwork abilities. Young people also learn about the different fields of study and careers in natural resources.



## LEARN

### Promoting Lifetime Activities for Youth Day (P.L.A.Y.)

**Klamath Falls, OR:** The Lakeview District's Klamath Falls Resource Area teamed up with local partners to introduce youth to shooting, fishing, trapping, duck and goose calling, outdoor safety and survival, archery, horse packing, wildlife identification, and camping through an engaging mix of seminars, demonstrations, and activities. The BLM staffed a display booth at the event, which familiarized youth to the local area's wildlife as they walked along a trail through simulated range and forest lands. More than 3,000 attended this popular event, now in its third year.

### A Victorian Christmas at Yaquina Head Lighthouse

**Newport, OR:** The BLM Yaquina Head Outstanding Natural Area and the Friends of Yaquina Lighthouses in Newport hosted a Victorian Christmas at the site's interpretive center in Newport. There were traditional parlor games, Victorian crafts, period music, and carol sing-alongs with local musicians and vocal ensembles. The lighthouse also celebrated its 140<sup>th</sup> year with a series of summer programs in 2013.

### Wenatchee Kids Touch-a-Truck!

**Wenatchee, WA:** More than 1,600 people spent a spring day learning about businesses and government agencies in eastern Washington. The Touch-a-Truck activity drew







crowds to see helicopters, large trucks, and a BLM brush engine used for initial attacks in wildland firefighting. Children used backpack water pumps on imaginary fires, sat in the driver's seat of the engine, and watched BLM specialists demonstrate fireline tools. A large tree segment with an embedded chainsaw provided a popular photo opportunity while also illustrating the hazards involved in felling timber.

## Twenty-Eight Years and Counting

**Medford, OR:** The Table Rock Environmental Education Program has steadily grown in popularity during its 28-year history. Centrally located above the Rogue River, this outdoor classroom is one of only a few outdoor educational programs available to residents of southern Oregon and northern California. Students explore ethnobotany, fire ecology, forest ecology, geology, Native American history and culture, noxious weeds, outdoor ethics, and wildlife.



## SERVE

### Oregon Teens Train Wild Horses

**Burns, OR:** The Burns District's Wild Horse and Burro Program enjoyed generous volunteer support in 2013. Of note, Fitzgerald Farms hosted its fifth annual Teens & Oregon Mustangs competition and adoption event.

This partnership effort, which includes the BLM and the Mustang Heritage Foundation, showcases the adaptability of yearling mustangs through youth trainers. Each year, Oregon teens train yearling mustangs for several months, then compete in a show for prizes. At the end of the competition, the gentled mustangs are adopted into permanent, private care.

## Life Skills Honed at the BLM

**Eugene, OR:** Working outside the traditional walls of most educational institutions, Sheldon High School's life skills program aids developmentally disabled high school students by teaching them life and job skills with the BLM. For nearly a decade, the BLM Eugene District Office has partnered with the Eugene School District to provide this unique training opportunity. The "Sheldon kids," as they have become affectionately known, have worked thousands of volunteer hours cleaning vehicles, folding maps, conducting trail maintenance, and assisting with office work and other tasks. In the words of a Eugene District employee, this program "...shows our heart and soul."

## Rogue River Trail

**Medford, OR:** In 2013, 220 enthusiastic volunteers scoured the Rogue River shoreline by vehicle, on foot, and by boat to remove the tons of trash that had accumulated in and along the river over the winter. And the annual Boy Scout weekend project saw volunteers working on the National Rogue River Trail and the Rainie Falls Trail, completing tread maintenance. The Scouts were rewarded with a Rogue River patch for their efforts.

## Bilingual Natural Science

**Wenatchee, WA:** "¿Cómo se dice 'BLM' en español?" ("How do you say 'BLM' in Spanish?") This question and many others were asked and answered through a new partnership between BLM's Wenatchee Field Office and Team Naturaleza. The BLM has connected with the Latino community through bilingual natural science field trips, conservation education, and stewardship activities. Volunteer events in 2013 included nonmotorized trail maintenance, graffiti coverup, litter cleanup, and a multifaceted National Public Lands Day event.





# Oregon/Washington

## Shipwreck Cleanup at Yaquina Head

**Yaquina Head Outstanding Natural Area:** A dedicated group of 60 volunteers contributed 2,000 hours at Yaquina Head Outstanding Natural Area, cleaning up debris from the wreck of a commercial fishing boat that sank off Newport's North Jetty in 2012. The debris included hundreds of commercial crab pots, buoys, and a large stainless steel boom ensnared by heavy lines. Volunteers descended 130 stairs to the nearly inaccessible beach, maneuvered across uneven cobblestones, and climbed over a large rock ledge to reach the debris—all within the short time window of low tide. They cut the buoy lines to untangle the ruined gear, loaded approximately 6,000 pounds of debris into bags, then reversed the trek and hauled the bags to a dumpster at the top of the bluff. The cleanup was a partnership involving Yaquina Head Outstanding Natural Area, Oregon Parks and Recreation Department, and the Newport Chapter of Surfrider Foundation, an international organization dedicated to the protection and enjoyment of oceans, waves, and beaches.



## WORK

### Long-term Benefits – Lifetime Experiences

**Coos Bay, OR:** Northwest Youth Corps members provided more than 30 weeks of labor at recreation sites, environmentally sensitive areas, and wildlife areas. Youths helped the Coos Bay District reduce the risk of fire; restore

fish and wildlife habitat; and provide road, recreation, and facility maintenance across the district. In addition, BLM specialists had the opportunity to teach the youths about rare plants in the area and Leave No Trace principles.

### Getting the Job Done

**Medford, OR:** Workcrews from the Josephine County Job Council assisted the BLM with much needed maintenance on the diverse trail network in Cathedral Hills, just outside Grants Pass. The popular trails provide recreational opportunities for hikers, mountain bikers, and horseback riders among acres of Douglas fir and Ponderosa pine forest. Job Council crews worked through the year clearing brush and trail drains and adjusting the width and slope of trail beds. In 2013 the crews also installed split-rail fencing to reduce visitor trampling of native wildflowers near one of the trailheads.

### Molalla River Recreation Opportunities Expand

**Salem, OR:** The BLM was able to open two new recreation sites along the Molalla River in 2013, thanks to years of community collaboration and hard work by youth crews in the Salem District. The BLM's statewide assistance agreement with the Oregon Youth Conservation Corps has enabled hundreds of young people to find summer jobs in their own communities. Along the Molalla, youth crews carved campsites out of a temperate rainforest, created stone accents along paths and trails, and improved access to the picturesque and popular river.





*Youth engagement is a high priority for BLM-Utah, with the state office encouraging its employee SuperStars to find ways to involve youth on the public lands. The state has a unique Adventure Crew, whose members document Utah's natural wonders through exploration and social media websites. At the Cleveland-Lloyd Dinosaur Quarry and Grand Staircase-Escalante National Monument, students of all ages can learn about Utah's world-class dinosaur fossils.*



## PLAY

### San Juan River Camp

**Monticello:** The BLM hosted the San Juan River Outdoor Summer Camp in summer 2013 for 25 underserved and Native American Utah youth. Students learned about astronomy, desert hydrology, geology, and public lands management while rafting down the San Juan River. They also had fun swimming and playing in the river.

### Empowering Native American Youth, One Camp at a Time

**State Office:** BLM-Utah and partner organizations sponsored a 1-day Earth Connections Camp in spring 2013 to reconnect urban Native American youth with the natural world and their cultural heritage. Native American educators and specialists staffed hands-on learning stations for approximately 30 young campers, including stations on native traditions, history, and nutrition.

### Take It Outside! Discovery Caravans

**Kanab:** From October 2012 to August 2013, 500 children and their families participated in community-based Discovery Caravans. They traveled in vehicle caravans from site to site to participate in hands-on Take It Outside! activities about botany, geology, history, paleontology, wildlife, and other subjects. Leave No Trace, environmental education, stewardship, and career pathways messages were woven into the Discovery Caravan activities.

### Paiute Youth Camp

**Grand Staircase-Escalante National Monument:** In summer 2013 the BLM, Southern Utah University, the Paiute Nation, and the Dixie National Forest piloted *Camp Kwiyamuntsi*, a natural resource camp for Paiute youth. Instructors and campers representing several bands of

Paiute joined agency instructors for 4 days of outdoor learning in the Dixie National Forest, the Paiute's traditional homeland. Paiute elders and BLM instructors teamed up to teach students about the environment, their unique cultural heritage, and careers in natural resource fields.

### Throwing Atlatls for Fun

**Vernal:** BLM-Utah's annual Jarvie Fest at the historic John Jarvie Ranch offered cultural demonstrations and hands-on activities that appealed to hundreds of young visitors. Kids loved throwing spears using an *atlatl*, a weapon pre-dating the bow and arrow. They also enjoyed grinding corn with a *mano* and *metate*, and creating their own rock art using sun-varnished rock slabs and horseshoe nails. Other stations featured lassoing, candle-making, rope braiding, an old-fashioned photography booth complete with Wild West costumes, and a blacksmith who made metal trinkets.



## LEARN

### A Dozen New Dinosaurs

**Kanab:** Utah public lands are world-famous for dinosaur discoveries, and the BLM hosts learning events to bring young people closer to these extinct creatures. These programs have become especially popular in the last 2 years with the discovery of more than a dozen new dinosaurs at the Grand Staircase-Escalante National Monument (GSENM). Among the 2013 offerings was an open house that featured a new dinosaur species, *Nasutoceratops titusi*. The dinosaur was named





# Utah

after the GSENM's lead paleontologist, Dr. Alan Titus. At the open house, children met Dr. Titus and other paleontologists, who guided the visitors as they viewed fossils up close.

## Celebrating Halloween, Red Cliffs Style

**St. George:** Pockets bulging with chocolates and flashlights, five park rangers representing the BLM and other agencies waited for kids to join them at a Halloween 2013 interpretive hike in the Red Cliffs National Conservation Area. Zombies young and old gathered at the Chuckwalla trailhead in St. George, and then lurched forward, using flashlights to scour the trail for scorpions. Rangers guided the hike, sharing stories and curious facts about the local fauna.

## Adventure along the Old Spanish Trail

**Old Spanish National Historic Trail:** In 2013 three BLM interns traveled more than 400 miles along the Old Spanish National Historic Trail, a historic trade route that connected New Mexico to California. Joined by BLM-Utah's new media lead and videographer, the "#OSTadventure" crew reached a national audience through live posting on various BLM social media sites. Crewmembers, who were met by a BLM or trail association field expert at each juncture, explored Utah's rich culture, history, and beauty, working with local BLM field offices to highlight recreation resources adjacent to the trail. The crew's overall message to other young people: "This is what you could be doing right now!"

## High School Native Plant Project

**Kanab:** Under the direction of a Kanab High School (KHS) teacher, students collected native seeds from BLM lands, grew seedlings in the KHS greenhouse, and transplanted the seedlings into experimental plots. During the last 5 years, more than 100 students have successfully grown the native plant winterfat in Grand Staircase-Escalante National Monument test plots, areas where the BLM has had only limited success. The BLM is expanding the program to other area schools and the Kaibab Band of Paiute Indians.

## Professor Valley Field Camp

**Moab:** The Canyonlands Field Institute and the BLM Moab Field Office hosted nearly 1,000 students, some from as far away as Florida and Oregon, at the Professor Valley Field Camp, a semi-primitive environmental education facility. The students also participated in guided educational trips down the Colorado River.

## Reenacting the Long Walk

**Blanding:** Robert Turk, a fifth-grade teacher from Blanding and graduate of the 2012 Project Archaeology Leadership Academy, coordinated the community's annual Heritage Fair, where more than 600 students learned about the history and culture of southeastern Utah. The teacher also engaged 100 students from nearby Bluff in a culture and history fair featuring Project Archaeology materials. He led an additional 100 students on a reenactment of the Navajo Long Walk to commemorate the removal of the Navajo people from their homeland in the 1800s. Through this teacher's efforts, more than 800 students in southeastern Utah learned about archaeological stewardship and deepened their cultural understanding.



**SERVE**

## Artist in Residence at Grand Staircase-Escalante National Monument

**Kanab:** Wayne Geary volunteered as the 2013 Escalante Canyons artist-in-residence, a program cosponsored by the Escalante Canyons Art Festival and the Grand Staircase-Escalante National Monument. In September, Geary, who works in oil, acrylics, pastels, watercolors, and other media, spent 4 weeks painting in Escalante and the monument. During his residency, Geary conducted art programs with





the local school and gave public presentations and tours about the influence of the area's geology on his art. He also exhibited his resulting artwork during the 10<sup>th</sup> anniversary Escalante Canyons Art Festival.

### Scouts Protect Wildlife and Rock Art

**Vernal:** Vernal Field Office recreation planners, archaeologists, and wildlife biologists teamed up with Boy Scouts of America to help scouts earn patches and merit badges. BLM employees and youth partners hosted a Cub Scout tour of Pariette Wetlands, where excited young scouts earned patches. Archaeologist Jimmie McKenzie helped another Scout who was working on his Eagle Scout project, building a fence to help protect a rock art site from grazing animals.



## WORK

### Recreation with a Side of "Suicidal Tendencies"

**St. George:** Beginning in May 2012, crews from American Conservation Experience worked for more than a year building tread and constructing retaining walls on the BLM's aptly named Suicidal Tendencies Trail near St. George. The technical 4.1-mile mountain biking and hiking trail plunges down one side of a mesa before climbing back up an adjacent one. Throughout the project, local users tested completed segments, providing positive feedback and encouragement to the crew. The entire trail can be safely viewed from the BLM National YouTube channel.

### Restoring Native Willows

**Kanab:** The Escalante River Watershed Partnership continued its habitat restoration work in the Grand Staircase-Escalante National Monument. Invasive Russian olive trees, originally planted to control erosion, had overtaken the river's streambeds and watershed. In 2013 two dozen youth battled thick, thorny branches with chainsaws and herbicides as part of this long-term effort to restore native willows and cottonwoods. The project is supported by local, regional, and national partners.

### Dinosaur Quarry Interns

**Price:** The Cleveland-Lloyd Dinosaur Quarry continued its outstanding internship program, engaging participants from both American Conservation Experience and the Geological Society of America's GeoCorps program. In addition to conducting paleontological research, the interns played a critical role in the site's education and outreach programs for students and visitors.

### Employee Youth Support

**State Office:** BLM-Utah continued its employee SuperStar recognition program in 2013, selecting eight recipients from throughout the state for their support of the Utah Youth Program. Awards were presented by State Director Juan Palma to employees, including a paleontologist, a botanist, an assistant field office manager, and a grants management officer. This annual awards program helps to illustrate that every BLM employee can play a role in supporting the agency's Youth Program.



# Wyoming

*BLM-Wyoming's education and youth programs have grown considerably over the past few years. The National Historic Trails Interpretive Center in Casper is a notable Hands on the Land site, whose staff are working with the Wyoming State Museum on Discovery Trunks. The state office also promotes education programs on invasive weeds, wildland fire, and preservation of cultural assets.*



## PLAY

### Summer Classrooms

**Rawlins:** Rawlins schools and the BLM partnered to conduct a Summer Adventures Outdoor Classroom, where participants learned about the Continental Divide National Scenic Trail, water and watersheds of the Teton Reservoir and North Platte River, wildlife, oil and gas geology, and stewardship of public lands.



## LEARN

### Wind River Student Art Show

**Casper:** The Wolf Dancers and Drummers of Wyoming Indian High School in Ethete performed at the BLM National Historic Trails Interpretive Center during the closing ceremony for the school's temporary art exhibit, "Resurgence of Native Spirit." The center coordinated installation of the summer exhibit, which featured 20 sculptures and 30 prints from 35 Native American youth artists. The exhibit

allowed the students to showcase their creativity and talent and provided the center with new centerpieces for interpretation of traditional Native American culture. During the summer, approximately 6,000 people viewed "Resurgence."

### Staying Healthy the Pioneer Way

**Casper:** In midsummer, volunteers and staff from the BLM National Historic Trails Interpretive Center and the National Historic Trails Center Foundation loaded wagons, climbed into saddles, and made their way through Casper along with 200 other entries in the 2013 Casper Wyoming Parade. The theme for this year's event was "Trails to a Healthy State." Center staff created banners to infuse that idea with some historical context, coming up with "Stay Healthy the Pioneer Way...Walk!" and "Get Your Pioneer on...Walk!" The center's entry included three wagons, more than a dozen horses, and walkers dressed in pioneer clothing.

### The General Land Office Reappears

**Cheyenne:** With the U.S. Forest Service, BLM-Wyoming staff cohosted 3,400 visitors at a replica General Land Office (GLO) in Old Frontier Town at the 2013 Cheyenne Frontier Days, a 10-day celebration of the Old West. Resource specialists at the GLO booth provided visitors with information about Wyoming public lands and resources as well as hands-on fossil and wildlife demonstrations.

### Youth History Club

**Casper:** The National Historic Trails Interpretive Center hosts a History Club for second- to fifth-graders on the third Saturday of every month. The club's mission is to connect students to their cultural heritage and the area's natural resources. Lessons are both conventional (in the classroom) and exploratory (on the land). Activities range from reenactment of the life of a "mountain man" to ecosystem studies. In 2013 the center's History Club, which is free to participants, was funded with a donation from a local charitable foundation.







## SERVE

### Improving Cottonwood Creek Trails

**Cody:** Fifteen young people and two adult leaders from the Conservation Outdoor Recreation Education (CORE) youth group joined BLM employees at the Five Springs Falls Campground and the Cottonwood Creek Trailhead/Campground for 5 days of work projects along the west slope of the Bighorn Mountains. They painted 82 parking bollards, two kiosks, and an electrical utility board; stained picnic tables and benches; repaired two sections of washed-out trail; and collected trash from the campsites. The group also made improvements to the Cottonwood Creek Trailhead, re-shingling and painting the informational kiosks and staining the picnic tables and gazebo.

### Site Stewards Record Petroglyphs

**Rock Springs:** In the summer of 2013, 15 volunteers led by an archaeologist from the Rock Springs Field Office began documenting damage that has occurred at the La Barge Bluffs Petroglyph Site during the past 100 years. The group also discovered a number of previously unrecorded petroglyphs. Volunteers came from the Ute Indian Tribe of the Uintah and Ouray Reservation, the Wyoming State Historic Preservation Office, Wyoming Archaeology Society, and the Wyoming Association of Professional Archaeologists.

### 2013 BioBlitz at Mosier Gulch

**Buffalo:** In 2013 the Audubon Society (Audubon Rockies) and the BLM teamed up to host the 2013 BioBlitz at the BLM Mosier Gulch Recreation Area near Buffalo. Almost 40 participants spent a weekend cataloging plants, insects, birds, reptiles, amphibians, bats, and other wildlife along

the Clear Creek Trail. The event's purpose was to connect kids and adults to nature while also collecting useful data. The family-friendly event offered individual sessions on subjects ranging from bird banding to echolocation by bats. Partners from Wyoming Game and Fish Department encouraged young scientists to practice safe handling techniques and collect data on several nongame species.



## WORK

### Seeds of Success Going Strong

**Statewide:** Nine Seeds of Success collection teams fanned out across the state to work on the program in 2013. Interns from several partner organizations, including the Chicago Botanic Garden's Conservation and Land Management Internship Program, the Great Basin Institute, and the Wyoming Conservation Corps, scouted and mapped plant populations and collected native seeds for use in research conducted by the congressionally established Native Plant Materials Development Program. Some collected seeds were put in storage for conservation and future restoration projects. Others were evaluated for possible commercial production to enhance Greater Sage-grouse habitat.

### Powder River Restoration

**High Plains:** Members of the Wyoming Conservation Corps worked alongside volunteers from Devon Energy and BLM employees on a 10-day preservation and restoration project in the Powder River Basin, thinning ponderosa pine and juniper to reduce the threat of fire in the area. Crews also helped remove water monitoring weirs that were no longer needed. Corps participants also attended an education day sponsored by the energy company, touring a drilling rig and learning about the area's geologic formations and oil and gas production.





# Appendix

Table 1

<b>PLAY</b>		
<b>BLM Take It Outside! Programs and Participants, FY 2013</b>		
State Office	Number of Programs Reported	Participants
Alaska	4	4,688
Arizona	4	733
California	11	3,050
Colorado	17	2,204
Eastern States	9	6,202
Idaho	26	10,353
Montana/Dakotas	9	957
Nevada	14	8,155
NM/OK/TX	20	1,290
Oregon/Washington	62	9,000
Utah	56	14,018
Wyoming	24	7,381
<b>Total</b>	<b>256</b>	<b>68,031</b>

Table 2

<b>WORK</b>			
<b>Payroll and Partner Youth Hires, FY 2013</b>			
State Office	BLM	Partner	Total
Alaska	67	177	244
Arizona	40	216	256
California	181	163	344
Colorado	83	85	168
Eastern States	20	7	27
Idaho	208	8	216
Fire & Aviation	7	0	7
Montana/Dakotas	112	79	191
Nevada	171	101	272
NM/OK/TX	118	118	236
Oregon/Washington	311	538	849
Utah	123	52	175
Wyoming	140	33	173
Washington Office	43	8	51
National Operations Center	16	0	16
<b>Total</b>	<b>1,640</b>	<b>1,585</b>	<b>3,225</b>

Table 3

<b>LEARN</b>		
<b>BLM Hands on the Land Program Participants, FY 2013</b>		
State Office	Number of Sites Reported	Number of Participants
Alaska	2	11,510
Arizona	6	1,673
California	9	12,714
Colorado	5	1,460
Eastern States	1	3,703
Idaho	4	786
Montana/Dakotas	2	205
Nevada	2	10,488
NM/OK/TX	4	4,412
Oregon/Washington	6	12,295
Utah	3	2,298
Wyoming	2	1,175
<b>Total</b>	<b>46</b>	<b>62,719</b>

Table 4

<b>BLM Interpretive Programs and Participants, FY 2013</b>		
State Office	Number of Interpretive Sites Reported	Number of Visitors
Alaska	2	44,741
Arizona	23	182,463
California	16	2,846,791
Colorado	15	22,360
Eastern States	2	90,379
Idaho	8	32,370
Montana/Dakotas	2	41,769
Nevada	7	394,858
NM/OK/TX	9	145,952
Oregon/Washington	16	452,035
Utah	12	217,188
Wyoming	2	18,023
<b>Total</b>	<b>114</b>	<b>4,488,929</b>



Table 5

Project Archaeology Participation, FY 2013			
State	Educators Certified	K-12 Direct Instruction	Other Instruction
Alaska	0	20	0
Arizona	10	250	0
California	0	2,338	209
Colorado	19	40	25
Florida	60	690	0
Hawaii	0	0	32
Iowa	37	50	0
Kansas	35	296	54
Kentucky	14	557	1,752
Missouri	28	350	0
Montana	31	1,135	0
N. Carolina	0	178	0
New Hampshire	10	0	0
New Mexico	35	122	0
Oklahoma	0	90	12
Pennsylvania	20	30	30
Tennessee	35	460	0
Utah	0	813	0
Wyoming	0	77	18
Project Archaeology National Office	0	145	0
<b>Total</b>	<b>334</b>	<b>7,641</b>	<b>2,132</b>

Table 6

BLM Education Program Participants, FY 2013		
State Office	Number of Programs Reported	Number of Participants
Arizona	30	22,562
California	20	4,979
Colorado	38	4,710
Idaho	58	26,483
Montana/Dakotas	13	3,827
Nevada	7	6,276
NM/OK/TX	6	3,192
Oregon/Washington	77	20,297
Utah	29	75,751
Wyoming	39	6,407
<b>Total</b>	<b>317</b>	<b>174,484</b>

Does not include Hands on the Land programs reported separately.

Table 7

National Volunteer Total Hours and Value of Work for Fiscal Year 2013			
Program	Volunteer Hours	Donated/ Hosted Work Hours	Total Hours
Biological Resources	52,826	41,437	94,263
Cadastral Survey	717	232	949
Cultural/Historical	74,657	11,162	85,819
Environmental Education/ Interpretation	88,627	10,443	99,070
Minerals	4,377	0	4,377
Recreation	435,311	96,794	532,105
Riparian/Watershed	17,821	73,310	91,131
Support Services	43,842	14,991	58,833
Wild Horse and Burro	18,253	96,735	114,988
Wilderness/WSA	21,239	14,119	35,358
Other	16,088	19,990	36,078
<b>Total Hours</b>	<b>773,758</b>	<b>379,213</b>	<b>1,057,759</b>
<b>Program Funds Expended</b>	<b>\$263,868</b>	<b>\$920,342</b>	<b>\$1,184,210</b>
<b>Value of Work*</b>	<b>\$17,448,243</b>	<b>\$8,551,253</b>	<b>\$23,852,465</b>

The term "volunteer" as used in this report includes donated workers. Volunteers do not receive pay for their service to the BLM. They donate their time, and in some instances, equipment and money to assist the BLM with a variety of tasks. Donated or hosted workers, by contract, receive compensation from another organization but work for the BLM at no charge.

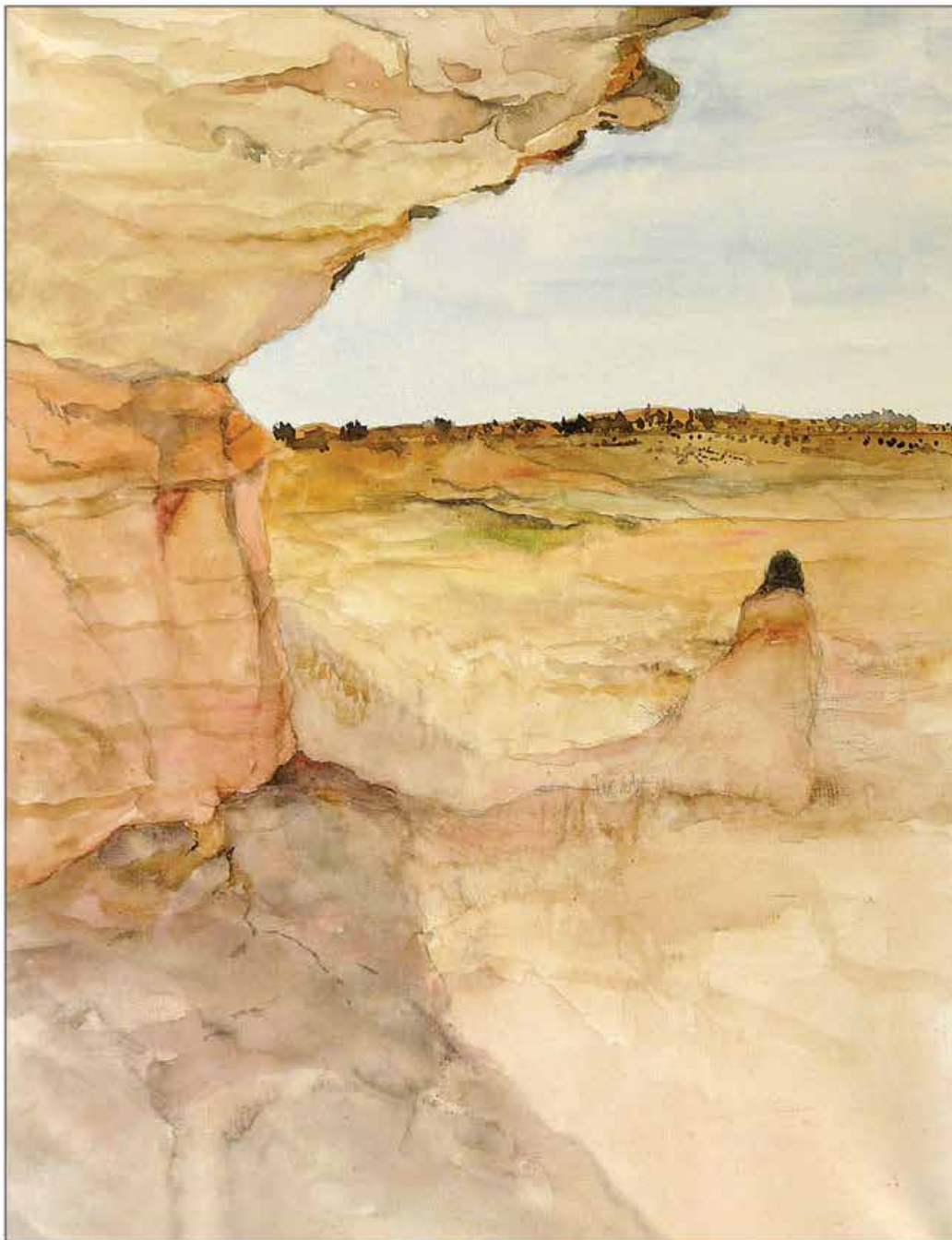
Table 8

Summary of BLM State Office Volunteer Contributions for Fiscal Year 2013				
State Office	Hours	Value*	Work Years	Number of Individuals
Alaska	29,478	\$664,729	16.4	2,059
Arizona	129,506	\$2,920,360	71.9	1,238
California	258,756	\$5,834,948	143.8	8,095
Colorado	199,039	\$4,488,329	110.6	4,699
Eastern States	20,616	\$464,891	11.5	785
Idaho	40,268	\$908,043	22.4	1,323
Montana	46,372	\$1,045,689	25.8	833
Nevada	49,479	\$1,115,751	27.5	1,547
New Mexico	113,253	\$2,553,855	62.9	1,142
Oregon	143,294	\$3,231,280	79.6	3,060
Utah	100,100	\$2,257,255	55.6	4,478
Wyoming	19,970	\$450,324	11.1	838
National Interagency Fire Center	212	\$4,781	0.1	5
National Operations Center	2,111	\$47,603	1.2	6
Washington Office	517	\$11,658	0.3	6
<b>Total</b>	<b>1,152,971</b>	<b>\$25,999,496</b>	<b>640.7</b>	<b>30,114</b>

One work year is based on 1,800 work hours.

\*Value based on 2013 independent sector value of volunteer time (\$22.55 per hour).





"Drip Line Shadow" watercolor by Arthur Short Bull  
Canyons of the Ancients National Monument • Colorado

BUREAU OF LAND MANAGEMENT

## Artist-in-Residence Program 2012

Taking Public Lands to Heart



[www.BLM.gov/education](http://www.BLM.gov/education)

The national BLM Artist-in-Residence Program creates a structure to share the scenic beauty and unique stories of the BLM's landscapes with the public through the world of art. In 2013, the BLM published posters for several of the artists, including "Drip Line Shadow" (above) by Arthur Short Bull, who was in residence at the Canyons of the Ancients National Monument in Colorado.